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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

WOODS, ERIC V

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/688,513	Applicant(s) BATTLES, AMY E.	
	Examiner Eric Woods	Art Unit 2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-18, 21-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-18, 21-24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 November 2005 has been entered.

Response to Arguments

Applicant's arguments, see amendments and Remarks pages 1-7, filed 7 November 2005, with respect to the rejection(s) of claim(s) 1-4, 7-18, 21-24, and 26-29 under 35 USC 103(a) have been fully considered and are persuasive.

Therefore, the rejection of claims 1-4, 7-18, 21-24, and 26-29 under 35 USC 103(a) as unpatentable over Middleton in view of Sawano has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of various references as below.

It is noted that applicant has not disputed in the last Office Action that the Middleton reference teaches every limitation except the visible indicia and possibly transferring the selected portion of the image. Therefore, applicant has estopped himself from arguing those limitations on appeal. The next action will be made **FINAL**.

The term 'representation' is shown by applicant's specification (and by the claims) to mean an image – e.g. a 'representation of an image' is simply that image.

Middleton clearly teaches that the center of the image is zoomed in [0020] during image review mode. Claim 9 does not require that this be done during image capture mode. It is pointed out that if the center of the image is zoomed during image manipulation or viewing mode, it would have been obvious to do so during image capture mode as well, since assuming the camera was perfectly steady the zoom would be applied to the center, which generated the desired end result.

Applicant is aware that the courts have held that the Patent Office must construe terms in their broadest reasonable interpretation (*In re Morris*), and the claim construction in front of the PTO is qualitatively different than before a court, so the claim construction practices of *Markman* do not apply. If applicant wants to imply that the magnification consists of discrete steps in the sense that the **levels** of magnification are discrete, then applicant needs to amend the claim to use the word 'level' or 'interval' to make it clear what is intended. Applicant's representative is encouraged to contact the examiner to arrange an interview.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 7-8, 22-24, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton in view of Haeberli (US PGPub 2003/0194148 A1).

As to claim 1,

A digital camera comprising: (Preamble is not given patentable weight, since it only recites a summary of the claim and/or an intended use, and the process steps and/or apparatus components are capable of standing on their own; see *Rowe v. Dror*, 112 F.3d 473, 42 USPQ2d 1550 (Fed. Cir. 1997), *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999), and the like.)

-An image playback system that presents a representation of an image, wherein magnification logic responsive to a user preferred magnification step is applied to image information used to generate the representation; (Middleton describes an image playback system that presents a representation of an image (see Fig. 2, display 140 which displays images, and see paragraph [0024], wherein a user can view an image on display 140) wherein magnification logic (see Middleton, Fig. 1, wherein microprocessor 124 is the magnification logic because it controls programs stored in memory 123, and wherein memory 123 stores images to be magnified – see paragraphs [0016] and [0019]) responsive to a user preferred magnification step is applied to image information used to generate the representation (see paragraphs

[0019] and [0020], wherein a user uses multi-function control 142 to perform a zoom or magnification function)

-A magnification control including a zoom in switch and a zoom out switch to effect respective zoom in and zoom out operations on the representation; (Middleton - see Fig. 2 and paragraph [0020], wherein joystick control 148 or multifunction control 142 allows a user to zoom in and out of a stored image);

-A position control including an up switch and a down switch, a left switch and a right switch to effect respective up, down, left, and right pan operations on the representation; and (Middleton - see Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein joystick control 148 allows for pan operations on the image, see paragraph [0020])

-Logic for identifying that portion of the image information responsible for the representation, wherein the logic is responsive to a transfer control and automatically presents visible indicia on an unmodified representation to demark a select portion of the image information that is transferred as modified image information. (Middleton, Fig. 1, wherein microprocessor 124 is the logic identifying that portion of the image information responsible for the representation because it works in conjunction with image processing program instructions which are integrated with microprocessor 124, and microprocessor 124 access memory 123, which stores images to be processed and magnified – see paragraphs [0016] and [0019])(Haeberli teaches this in Figures 9A-9B. Haeberli Figure 9b, which shows the base image – that is, the selected portion of the image 904 is shown. Haeberli Figure 9, clearly shows cropped area 904 in Figure 9b,

where the cropping indicator is positioned to indicate the area that will be cropped, where the user can ([0081-0084]) move it around, and otherwise alter it to their specification, and this clearly constitutes 'automatically presenting visible indicia on an unmodified representation', e.g. the selected portion of the base image (906 is selected portion, e.g. after magnification). Haeberli clearly teaches that the crop indicator contains 'In' and 'Out' buttons that allow the user to zoom in and out as desired, and to move the crop indicator in [0082]. Finally, the Haeberli reference teaches allowing the user to save and transmit the final version over the Internet or the like [0002-0007])

This limitation is notoriously well known in the art, for example the Paint program in Microsoft Windows has the ability for the user to designate the desired region and it will appear on the screen. Other examples of this being well known are US 2003/0103247 to Masera – see Figures 3 and 4 for example.

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Middleton with Haeberli so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the image to see the real location of that portion of the image, to allow the user to confirm a cut-and-paste operation and/or to create a new image consisting of only the selected

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portion, or the like, and showing the marker box of Haeberli is inherently part of that. Showing the crop region makes sense, so that the user can alter [0008-0010] it to fit their preferences and it will correctly indicate what the final region to be cut would be, with the indicia being transparent [0018].

Middleton transmits the desired end image, and the system of Middleton allows the user to use the crop indicators on the image, and to manipulate it [0018] it anyway. The details of Haeberli concern image manipulation where the user of the system of Middleton could manipulate the image and otherwise modify it, and transmit the modified results. Therefore, since that portion of Haeberli involving the manipulation of images is shown to be preferred by users for a plurality of reasons and to be beneficial [0013-0020 as examples], it would have been obvious one of ordinary skill in the art at the time the invention was made to modify Middleton (the camera phone) in light of Haeberli to include such capabilities, such that it could manipulate images more effectively before it uploaded a desired end result.

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haeberli with Middleton so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the

image to see the real location of that portion of the image, to allow the user to confirm a crop operation and/or to create a new image consisting of only the selected portion, or the like, and showing the marker box of Haeberli is inherently part of that.

With regard to claim 2, a transfer control to effect a transfer operation of the image information associated with the representation as modified by the magnification and position controls to a device communicatively coupled to the digital camera (see Middleton, paragraph [0026], wherein a user uses a joystick to zoom in on an image, and wherein the image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claim 3, wherein the magnification logic applies a discrete magnification step proximal to a midpoint of the digital camera's range for digitally magnifying the image information (see Middleton, paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140 at a focal point of the image which is at the center of camera phone 100's range or view).

With regard to claim 4, Middleton describes wherein operation of successive zoom in and zoom out operations, respectively occur in sufficiently small increments so as to be perceived by the user as continuous (see Middleton, paragraph [0020], wherein the user zooms in and out of a stored image in image review mode, and wherein the zoom control maintains a selected focal point at the center of the display as the user zooms in and out of the image).

With regard to claim 7, wherein the transfer operation forwards the select portion of the image information (see Middleton, paragraph [0026], wherein a user uses a

joystick to select a focal point on an image, and to then zoom in on an image at the selected focal point, and wherein the selected/zoomed image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claim 8, Middleton describes an image acquisition system; and a shutter that triggers the image acquisition system to acquire and index image information responsive to light incident upon an image sensor while the image playback means is active (see Middleton, paragraph [0015], wherein the image acquisition system is the camera phone 100 which comprises a camera assembly 110, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is active. If the image were not inherently indexed, then there would be no way for the user to access the acquired images).

With regard to claim 22, this is a duplicate of claim 1 (the rejection to which is incorporated by reference) except that it recites 'means', where the means shown in Middleton correspond to the means recited in applicant's specification as previously pointed out. This has been discussed thoroughly in previous Office Actions.

With regard to claim 23, means for effecting a transfer of the image information associated with the representation as modified by the means for effecting zoom in and zoom out operations and means for effecting up, down, left, and right pan operations to a device communicatively coupled to the digital camera representation (see Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein

joystick control 148 allows for pan operations on the image, see paragraph [0020], and further see Middleton, paragraph [0026], wherein a user uses the joystick to zoom in on an image, and wherein the image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claim 24, wherein the means for effecting zoom in and zoom out operations on the representation applies magnification steps in sufficiently small increments so as to be perceived by the user as continuous (see Middleton, paragraph [0020], wherein the user zooms in and out of a stored image in image review mode, and wherein the zoom control maintains a selected focal point at the center of the display as the user zooms in and out of the image).

Means for identifying that portion of the image information responsible for the representation (see Middleton, Fig. 1, wherein microprocessor 124 is the logic identifying that portion of the image information responsible for the representation because it works in conjunction with image processing program instructions which are integrated with microprocessor 124, and microprocessor 124 access memory 123, which stores images to be processed and magnified – see paragraphs [0016] and [0019]).

With regard to claim 26, wherein the means for identifying is responsive to the means for effecting a transfer of the image information and presents visible indicia on the unmodified representation to demark a select portion of the image information (see Middleton, paragraph [0020], wherein the center point of a stored image remains at the center of the display as the user zooms in and out of the image, and wherein the focal

may be changed to a different selected point on the image by the user, and see paragraph [0026].

With regard to claim 27, wherein the means for effecting a transfer of image information forwards the select portion of the image information (see Middleton, paragraph [0026], wherein a user uses a joystick to select a focal point on an image, and to then zoom in on an image at the selected focal point, and wherein the selected/zoomed image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claim 28, wherein the means for presenting applies a discrete magnification step proximal to a midpoint of the digital camera's range for digitally magnifying the image information (see Middleton, paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140 at a focal point of the image which is at the center of camera phone 100's range or view).

With regard to claim 29, means for acquiring image information; and means for triggering the means for acquiring image information such that the means for acquiring indexes image information responsive to light incident upon an image sensor while the means for presenting is active (see Middleton, paragraph [0015], wherein the image acquisition system which acquires image information is the camera phone 100 which comprises a camera assembly 110, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is active. If the

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image were not inherently indexed, then there would be no way for the user to access the acquired images).

Claims 9-18 and 21 are rejected under 35 USC 103(a) as unpatentable over Middleton in view of Haeberli and Roman et al (US PGPub 2004/0250216 A1).

Computer-readable medium containing program for making a computer execute the method is a trivially obvious variant of the computer-implemented method, since a computer prima facie requires a program in order to implement a method.

As to claims 9 and 14,

A method for editing image information with a digital camera, comprising: (Preamble is not given patentable weight, since it only recites a summary of the claim and/or an intended use, and the process steps and/or apparatus components are capable of standing on their own; see *Rowe v. Dror*, 112 F.3d 473, 42 USPQ2d 1550 (Fed. Cir. 1997), *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999), and the like.)

-Identifying image information; (Middleton allows the user to select, capture, and/or download images for manipulation and/or other things, that comprise obtaining identifying information for an image [0018-0021, 0007-0009, and the like])

-Generating a representation of the image information; (Middleton, paragraphs [0015] and [0020], wherein the camera phone 100, which comprises a camera assembly 110, is the logic for acquiring information, and wherein the camera's lens focuses light onto

image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image)

-Magnifying the representation using a discrete magnification step proximal to a midpoint of the digital camera's range for digitally magnifying the image information to produce a modified representation of the image information; (Middleton, paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140 at a focal point of the image which is at the center of camera phone 100's range or view.)

-Presenting the modified representation of the image information; (Middleton Fig. 2, display 140 which displays images, and see paragraph [0024], wherein a user can view the image on display 140. Next, the zoomed version is presented to the user [0019-0020]. The use of the term 'step' is not invoking 35 USC 112, sixth paragraph. Further, the term 'step' is broad, and could be taken to simply mean a sub-step of the process. See above in Response to Arguments)(Roman teaches in [0020-0021] that the user can control the magnification in discrete amounts – see Figures 2 for examples of this)(Any time the user magnifies the image, it presents a new representation of the image)

-Controllably magnifying the modified representation responsive to a magnification control associated with the digital camera; (Middleton camera (see Fig. 2 and paragraph [0020], wherein joystick control 148 or multifunction control 142 allows a user to zoom in and out of a stored image))(Roman utilizes cursor control devices to set the zoom ratio [0019-0021].)

-Controllably panning across the modified representation such that the preferred subject matter is observable in a desired representation; (Middleton teaches this limitation, in

panning across the representation (see Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein joystick control 148 allows for pan operations on the image, see paragraph [0020])(Roman allows the user to pan across the image by moving the control window [0019-0021])

-Identifying that portion of the image information responsible for the modified representation; and (Haeberli clearly teaches that the user selects a portion of the image (e.g. Figures 9a and 9b), where the user sets a crop mask that is representative of the desired portion of the viewed image)

-Automatically presenting at least one visual indicia on an unmodified representation to demark the portion of the image information identified in the identifying step. (Haeberli shows visual indicia on the screen to indicate the portion of the image that was selected and presented, as in Figure 9b.)(Roman shows such a visual indicia on the control window)

Haeberli explicitly shows the user selecting a region from a larger image (see for example Figures 9-10 and 12a-12b), as does Roman (Figures 2-5), so that it is clear what portion of the image is being selected (crop mask in Haeberli 9b as discussed in the rejection to claim 1, which is incorporated by reference).

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify Middleton with Haeberli so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the image to see the real location of that portion of the image, to allow the user to confirm a cut-and-paste operation and/or to create a new image consisting of only the selected portion, or the like, and showing the marker box of Haeberli is inherently part of that. Showing the crop region makes sense, so that the user can alter [0008-0010] it to fit their preferences and it will correctly indicate what the final region to be cut would be, with the indicia being transparent [0018].

Middleton transmits the desired end image, and the system of Middleton allows the user to use the crop indicators on the image, and to manipulate it [0018] it anyway. The details of Haeberli concern image manipulation where the user of the system of Middleton could manipulate the image and otherwise modify it, and transmit the modified results. Therefore, since that portion of Haeberli involving the manipulation of images is shown to be preferred by users for a plurality of reasons and to be beneficial [0013-0020 as examples], it would have been obvious one of ordinary skill in the art at the time the invention was made to modify Middleton (the camera phone) in light of Haeberli to include such capabilities, such that it could manipulate images more effectively before it uploaded a desired end result.

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and

paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haeberli with Middleton so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the image to see the real location of that portion of the image, to allow the user to confirm a crop operation and/or to create a new image consisting of only the selected portion, or the like, and showing the marker box of Haeberli is inherently part of that.

However, the above references do not expressly teach that the zooming is in discrete steps or that the unmodified image is shown with the box demarking the zoomed region per se. However, such a modification would have been obvious in light of the fact that Haeberli teaches that the user adapts the image to show the desired portion through cropping, rotation, zooming, and the like. Therefore, such modification would also be good in light of the fact that the user is enabled to zoom in closer and more accurately when the zoom step is known, and that the object of interest (found by the user when panning through the magnified version) would be properly displayed in the crop box of Haeberli when the original image was viewed.

With regard to claims 10 and 15, controllably transferring that portion of the image information corresponding to the desired representation (see Middleton, paragraph [0026], wherein a user uses a joystick to select a focal point on an image which is the desired representation of the image, and wherein the desired

representation of the image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claims 11 and 16, wherein the step of controllably magnifying results in the presentation of successive modified representations of the image information that give the impression to a user that magnification is continuous (see Middleton, paragraph [0020], wherein the user zooms in and out of a stored image in image review mode, and wherein the zoom control maintains a selected focal point at the center of the display as the user zooms in and out of the image).

With regard to claims 12 and 17, activating the discrete magnification step via a menu selection (see Middleton, paragraphs [0017], wherein display 140 allows a user to see menu options, and see paragraphs [0018], [0019], and Fig. 1, wherein user interface 134 includes a multi-function control 142, wherein multi-function control 142 controls a zoom function. See also paragraph [0021], wherein multi-function control 142 operates as a menu).

With regard to claims 13 and 18, enabling the image acquisition system to acquire image information responsive to light incident on an image sensor concurrently with any one of the identifying, generating, magnifying, panning, and transferring steps (see Middleton, paragraph [0015], wherein the image acquisition system is the camera phone 100 which comprises a camera assembly 110, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is

active. If the image were not inherently indexed, then there would be no way for the user to access the acquired images. Furthermore, note that an image can be taken and a wireless transfer of the picture can take place without the camera phone 100 leaving the camera mode. In addition, see Fig. 2, display 140 which displays images, and see paragraph [0024], wherein a user can view and identify the image on display 140 and the user can push the button at the same time as identifying and viewing the image).

With regard to claim 21, wherein the logic for acquiring information is accessible and executable concurrently with logic for indexing, presenting, magnifying, panning, and transferring image information (see Middleton, paragraphs [0015] and [0020], wherein the camera phone 100, which comprises a camera assembly 110, is the logic for acquiring information, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is active. If the image were not inherently indexed, then there would be no way for the user to access the acquired images. Furthermore, an image can be taken and a wireless transfer of the picture can take place without the camera phone 100 leaving the camera mode. See also Fig. 2, display 140, which displays or presents the images, and see paragraph [0024], wherein a user can view an image on display 140. See paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140. See Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein joystick control 148 allows for pan operations on the image, see paragraph [0020]).

Claims 9-18 and 21 are rejected under 35 USC 103(a) as unpatentable over Middleton in view of Haeberli and Nakano et al (US PGPub 2003/0179219 A1).

Computer-readable medium containing program for making a computer execute the method is a trivially obvious variant of the computer-implemented method, since a computer prima facie requires a program in order to implement a method.

As to claims 9 and 14,

A method for editing image information with a digital camera, comprising: (Preamble is not given patentable weight, since it only recites a summary of the claim and/or an intended use, and the process steps and/or apparatus components are capable of standing on their own; see *Rowe v. Dror*, 112 F.3d 473, 42 USPQ2d 1550 (Fed. Cir. 1997), *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999), and the like.)

- Identifying image information;

- Generating a representation of the image information; (Middleton, paragraphs [0015] and [0020], wherein the camera phone 100, which comprises a camera assembly 110, is the logic for acquiring information, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image)

- Magnifying the representation using a discrete magnification step proximal to a midpoint of the digital camera's range for digitally magnifying the image information to

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produce a modified representation of the image information; (Middleton, paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140 at a focal point of the image which is at the center of camera phone 100's range or view.)(

-Presenting the modified representation of the image information; (Middleton Fig. 2, display 140 which displays images, and see paragraph [0024], wherein a user can view the image on display 140. Next, the zoomed version is presented to the user [0019-0020]. The use of the term 'step' is not invoking 35 USC 112, sixth paragraph. Further, the term 'step' is broad, and could be taken to simply mean a sub-step of the process.

See above in Response to Arguments)

-Controllably magnifying the modified representation responsive to a magnification control associated with the digital camera; (Middleton camera (see Fig. 2 and paragraph [0020], wherein joystick control 148 or multifunction control 142 allows a user to zoom in and out of a stored image))

-Controllably panning across the modified representation such that the preferred subject matter is observable in a desired representation; (Middleton teaches this limitation, in panning across the representation (see Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein joystick control 148 allows for pan operations on the image, see paragraph [0020])

-Identifying that portion of the image information responsible for the modified representation; and (Haeberli clearly teaches that the user selects a portion of the image (e.g. Figures 9a and 9b), where the user sets a crop mask that is representative of the desired portion of the viewed image)

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-Automatically presenting at least one visual indicia on an unmodified representation to demark the portion of the image information identified in the identifying step. (Haeberli shows visual indicia on the screen to indicate the portion of the image that was selected and presented, as in Figure 9b.)(Nakano Figures 9 and 10 have a larger window with the base image in it and then shows the desired portion of the image in zoomed in form in the size that it appeared in the 'modified representation' after zooming.)

Haeberli explicitly shows the user selecting a region from a larger image (see for example Figures 9-10 and 12a-12b), as does Nakano (Figures 9 and 10), so that it is clear what portion of the image is being selected (crop mask in Haeberli 9b as discussed in the rejection to claim 1, which is incorporated by reference).

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Middleton with Haeberli so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the image to see the real location of that portion of the image, to allow the user to confirm a cut-and-paste operation and/or to create a new image consisting of only the selected portion, or the like, and showing the marker box of Haeberli is inherently part of that. Showing the crop region makes sense, so that the user can alter [0008-0010] it to fit

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their preferences and it will correctly indicate what the final region to be cut would be, with the indicia being transparent [0018].

Middleton transmits the desired end image, and the system of Middleton allows the user to use the crop indicators on the image, and to manipulate it [0018] it anyway. The details of Haeberli concern image manipulation where the user of the system of Middleton could manipulate the image and otherwise modify it, and transmit the modified results. Therefore, since that portion of Haeberli involving the manipulation of images is shown to be preferred by users for a plurality of reasons and to be beneficial [0013-0020 as examples], it would have been obvious one of ordinary skill in the art at the time the invention was made to modify Middleton (the camera phone) in light of Haeberli to include such capabilities, such that it could manipulate images more effectively before it uploaded a desired end result.

It would have been obvious to allow the user to see the selected, zoomed region in the larger context, so that after the user had seen the zoomed in image, they could then see where it was as part of the larger picture to ensure that they could cut and paste only the desired part of the image, while making sure that no important details in the overall picture had been missed. Clearly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haeberli with Middleton so that the camera of Middleton would allow the user to zoom in to a desired portion of the image and then go back to a large-scale, zoomed-out version of the image to see the real location of that portion of the image, to allow the user to confirm a

crop operation and/or to create a new image consisting of only the selected portion, or the like, and showing the marker box of Haeberli is inherently part of that.

Middleton/Haeberli do not expressly teach that the portion of the image zoomed into by the user is then shown in the crop box or indicator box. However, it would have been obvious to modify the combination above to utilize these techniques because it allows the user to better use the system and understand the position of the zoomed portion with respect to the original base image, such that when the zoomed portion is panned through to find the object of interest that the user would be able to then return to the overall base image and see its real location to ensure that the final selection was in fact the desired one (for example, in a situation where there are multiple versions of an object in one scene (e.g. multiple cars of the same color or some other thing where the user would need to verify that the correct object had been selected by looking at the overall, unmodified representation. Motivation for modification of Middleton/Haeberli in light of Nakano is that [0009-0012] doing so improves the contrast of the region of interest and various other limitations.

With regard to claims 10 and 15, controllably transferring that portion of the image information corresponding to the desired representation (see Middleton, paragraph [0026], wherein a user uses a joystick to select a focal point on an image which is the desired representation of the image, and wherein the desired representation of the image is subsequently sent to another wireless phone via the communication circuit 120 of Fig. 1).

With regard to claims 11 and 16, wherein the step of controllably magnifying results in the presentation of successive modified representations of the image information that give the impression to a user that magnification is continuous (see Middleton, paragraph [0020], wherein the user zooms in and out of a stored image in image review mode, and wherein the zoom control maintains a selected focal point at the center of the display as the user zooms in and out of the image).

With regard to claims 12 and 17, activating the discrete magnification step via a menu selection (see Middleton, paragraphs [0017], wherein display 140 allows a user to see menu options, and see paragraphs [0018], [0019], and Fig. 1, wherein user interface 134 includes a multi-function control 142, wherein multi-function control 142 controls a zoom function. See also paragraph [0021], wherein multi-function control 142 operates as a menu).

With regard to claims 13 and 18, enabling the image acquisition system to acquire image information responsive to light incident on an image sensor concurrently with any one of the identifying, generating, magnifying, panning, and transferring steps (see Middleton, paragraph [0015], wherein the image acquisition system is the camera phone 100 which comprises a camera assembly 110, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is active. If the image were not inherently indexed, then there would be no way for the user to access the acquired images. Furthermore, note that an image can be taken and

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a wireless transfer of the picture can take place without the camera phone 100 leaving the camera mode. In addition, see Fig. 2, display 140 which displays images, and see paragraph [0024], wherein a user can view and identify the image on display 140 and the user can push the button at the same time as identifying and viewing the image).

With regard to claim 21, wherein the logic for acquiring information is accessible and executable concurrently with logic for indexing, presenting, magnifying, panning, and transferring image information (see Middleton, paragraphs [0015] and [0020], wherein the camera phone 100, which comprises a camera assembly 110, is the logic for acquiring information, and wherein the camera's lens focuses light onto image sensor 114; and also see paragraph [0026], wherein the push button of the joystick is used as a shutter control that triggers the camera phone to acquire an image and to inherently index the image when the image playback means is active. If the image were not inherently indexed, then there would be no way for the user to access the acquired images. Furthermore, an image can be taken and a wireless transfer of the picture can take place without the camera phone 100 leaving the camera mode. See also Fig. 2, display 140, which displays or presents the images, and see paragraph [0024], wherein a user can view an image on display 140. See paragraphs [0019] and [0020], wherein the user zooms in and out of the image on the display 140. See Fig. 2, wherein joystick control 148 is inherently a up, down, left, right switch, and wherein joystick control 148 allows for pan operations on the image, see paragraph [0020]).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Eric Woods

February 14, 2006


ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER